mucous membrane, leads to the formation of cysts, and, finally, to a broad band of connective tissue. All traces of the glands finally disappear. Sex appears to have little influence in its production, but it is most apt to develop in the latter years of life. Carcinoma, even in distant parts of the body, plays an important *rôle* in its etiology.' The duration of the disease appears to be between nine months and two years, as nearly as can be determined. The symptoms, though not constant, are dilatation of the stomach, disappearance of the natural secretion and of mucus, diminution of the gastric movements, cardialgia. All these symptoms attend chronic gastritis, carcinoma, and neuroses.

The diagnosis is often impossible, but an important symptom is the good general condition and the absence of emaciation, which indicates more than an outward relation to progressive pernicious anæmia, especially when digestive disturbances attend the latter affection.

The prognosis is unfavorable, and therapeutics can offer little, though lavage with hydrochloric acid and arsenic may be tried.

In view of what has been said, the author deems it important, 1, that all patients with carcinoma of any organ, and who present any symptoms of pernicious anæmia, have the functions of their stomach tested; 2, that after death the organ be histologically investigated; 3, that the condition of the vagus, sympathetic, and Auerbach's and Meissner's plexus be studied.

INTERMITTENT AND LATENT ALBUMINURIA.

The following is an abstract of the conclusions drawn by DR. GEORGE JOHNSON, expressing the main points of his paper in the *British Medical Journal* of February 2, 1889, and embodying his views published in previous articles.

1. The presence of albumin in the urine, though small in amount and occasionally intermittent, is always pathological.

2. The practice of testing the urine in all, even the most trivial, ailments has revealed albuminuria in many youths and adolescents exposed to cold, wet, and over-fatigue, but who have not lived long enough for the ultimate evils of a neglected albuminuria to become developed.

3. The albuminuria of persons in apparently good health has no such special features as to require the application of such misleading terms as "physiological," "functional," "cyclical," and the "albuminuria of adolescence." It is of common occurrence in each sex and at any age.

4. In almost all instances these cases of albuminuria may be traced back to some exciting cause.

5. Nearly all cases of acute nephritis pass through the stage of intermittent albuminuria in their progress toward convalescence; and conversely, most cases of intermittent albuminuria may be traced to an acute nephritis.

6. Intermittent albuminuria, though having existed for years, is a curable condition, if only its exciting causes can be ascertained and counteracted by appropriate treatment. The neglect of such means, however, may convert it into persistent albuminuria, and this ultimately results in fatal degeneration of the kidneys.

7. Since albumin may exist in the urine of persons in apparent health, the

importance of examining the urine of all patients, and all applicants for life insurance, is obvious.

8. Since albumin may be present at one portion of the twenty-four hours, and absent at another, it is necessary to test the urine, not only after rest in bed and before breakfast, but also after food and exercise.

With regard to the question of albuminuria in life insurance, each case must be considered individually. The author, however, considers that no prudent man would recommend that an individual with a trace of albumin in his urine be accepted at an ordinary rate of premium.

SURGERY.

UNDER THE CHARGE OF

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TETANUS.

At a recent *séance* of the Société de Thérapeutique, M. **GUELPA**, after reviewing the history of the scientific study of tetanus, formulated the following conclusions as the result of his own observations made in conjunction with M. Weber. First, tetanus is an infectious disease. Second, although the horse is one of the animals most apt to contract this disease, it is certain that, contrary to the opinion of Verneuil, tetanus is not of equine origin; a telluric origin appears more probable, but that designation is also too restricted. We are probably within limits in admitting simply a bacterial point of departure. Third, tetanus is not the direct effect of microbes, but the consequence of poisoning through substances secreted by them. Fourth, at least during the first tetanic manifestations, the growth of the bacilli remains limited to the region of the wound. It is only later, and then very rarely, that there is any generalization of the bacillus in the organism. Fifth, as regards treatment, there are three indications: the destruction of the seat of lodgement of the bacilli; the elimination of the products of those microbes; the sedation of the nervous system. The first may be accomplished by vigorous curetting, or even deep excision, and by the use of lotions and dressings with strong solutions of sublimate (5 to 10 to 1000), or, perhaps still better, by the use of strong solutions of nitric or sulphuric acid. The elimination of the soluble poisons secreted by the microörganisms will be favored by the very free use of diuretics and diaphoretics, or by hypodermics of pilocarpine, which appears to have a specific action upon the bacillus of Nicolaiez. Finally, large doses of chloral will serve as the best sedative for the nervous system.

At the *Académie des Sciences*, M. **BASSANO** reported some observations upon the attenuation of the tetanic virus by passing through the cobaye. He has observed that animals inoculated with infectious earthy materials succumb